

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

YELLOWSTONE NATIONAL PARK

YELLOWSTONE PARK, WYO.

E OF THE SUPERINTENDENT

Copy from

FILE 143

MONTHLY REPORT

FOR

F e b r u a r y ,

1920.

MONTHLY REPORT.

1920.

February

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OFFICE OF THE SUPERINTENDENT

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March 8, 1920.

*Source
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Mr. A. at
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Dear Sir:

The following is my report on conditions in Yellowstone National Park, and on the operation of the park, for the month of February, 1920:

GENERAL CONDITIONS:

The average temperature for February was 21.4 above zero, which was 1.7 degrees warmer than the normal for the park during the average February for 33 years. The temperature was almost continually above normal during the first 19 days; the remainder of the month was moderately cold, the lowest temperature recorded, 8 below zero, occurring on the 28th. There were but three days during the month on which the temperature fell to zero or below.

The total precipitation for the month was 12.3 inches of snow, or 1.02 inches reduced to water which was 0.89 inches less than the normal precipitation for February. Most of this snow fell during one big storm which occurred February 19 to 21, when 9.5 inches fell.

On January 31 there were 8.6 inches of snow on the ground at Mammoth Hot Springs; on February 21st at the conclusion of the big storm this had increased to 17.3 inches, and this had settled so that at the end of February there were 15.6 inches remaining on the ground. Practically the same snowfall occurred throughout the park, so that at the end of February the depth reported for January 31st had increased by about ten inches. It thawed and settled more at Mammoth than at the higher stations in the park.

The monthly Meteorological Summary furnished by the local U. S. Weather Bureau is enclosed herewith.

As a whole, the weather conditions that prevailed throughout the month were ^{very} favorable to the wild animals which are undergoing one of their hardest winters, due to shortage of natural forage on their ranges. and the feeding had to be kept up throughout the month.

Travel.

The only road in the park open to motor travel during the month was the one between Headquarters and the northern entrance at Gardiner, Montana, 5 miles. The road between Headquarters and the northeast entrance was traveled throughout the month with teams and sleighs, by the contractor who carries the mail to Cooke City, and as far as Tower Falls and the Buffalo Farm by our own employees at those stations. Aside from this, the only practicable method of travel in the park was on skis or snowshoes.

Daily train service was maintained to Gardiner over the park branch of the Northern Pacific Railroad, and mail was received every day except Sundays which is not provided for by the Postoffice Department.

Six people represented the total travel to the park for the month of February, these entering at Gardiner and coming as far as Mammoth, on business or to see the wild animals. Copy of the Chief Ranger's travel report is enclosed herewith.

Labor and Supply Market.

No demand existed for labor, as all activities were on a winter basis. For the same reason no purchase of supplies of any consequence was made.

Under inquiry by circular proposal for baled alfalfa hay for use in feeding wild animals, a price was quoted of \$28 per ton for first-class hay f.o.b. the cars at Yakima, Washington. The freight rate on G.B.L. from Yakima to Gardiner is about \$3.21 per ton, which make the total price of the hay delivered at Gardiner \$31.21 per ton, which is considerably better than the prices quoted earlier in the winter.

II. PERSONNEL.

Employees.

On February 1st there were 55 employees in the park on duty under this office, and no change in number was made during the month of February. Below is given a list of the number of

employees serving under appointment, with a general statement of the kind of work performed by each class:

<u>No.</u>	<u>Class.</u>	<u>Kind of work performed.</u>
1	Asst. Engineer	Office Engineering.
1	Blacksmith	General Blacksmith work. Shoeing draft animals and ranger saddle horses, and overhauling tools and equipment.
5	Clerks	1 Disbursing agent and purchasing clerk; 1 on orders, proposals, and vouchers; 1 stenographer, files and revenues; 1 on payrolls and timekeeping; 1 on cost accounting and in charge of storehouse. At odd moments clerks assisted Ranger Skinner in indexing library, and tabulating notes on wild animals, birds, and other data relating to the establishment of the proposed museum.
1	Steward and Master of Transportation.	In charge of all transportation including shops and garage.
3	Electricians	One in charge of power plant who operated and did necessary line work. Two assistants who operated regular shifts including Sundays.
1	Buffalo Keeper	In charge of tame buffalo herd, feeding and caring for them.
1	Asst. Buffalo Keeper	Assisting buffalo keeper.
1	Foreman	In charge of stables, and spent most of month in shop repairing harness/for <i>and boots</i> next season's work.
1	Gen. Foreman	In charge construction work. Worked all month repairing and remodeling buildings at Headquarters.

<u>No.</u>	<u>Class.</u>	<u>Kind of work performed.</u>
1	Handyman	Worked in storehouse issuing supplies to families and rangers, corrals etc., and sorting over, moving and straightening up storehouses.
1	Lineman	In charge of telephone system, did emergency work and installed instruments. Also ran light truck hauling freight or express from railroad to Headquarters when not otherwise engaged.
1	Watchman	Watchman at Headquarters. Made hourly patrols for fire at night, and kept fire up and cleaned up Headquarters building. Worked Sundays as well as week days. <i>daily including Sundays</i>
1	Master Mechanic	<i>1-29</i> In charge of shops. Also did carpenter work and began overhauling of caterpillar tractors. <i>? learn about</i>
1	Automobile Mechanic	Worked on automobile and truck repairs. <i>except while on leave</i>
1	Plumber	In charge of general plumbing at Headquarters.
1	Painter	Finished remodeling his new paint shop, made new signs for use in park next season, and began renovation of employees quarters at Headquarters.
1	Telegraph Operator	Sent and received Western Union telegrams. Also put in regular shift as a switchboard operator, seven days a week.
1	Telephone Operator	Operated telephone switchboard.
1	Laborer	Miscellaneous work at Headquarters.
1	Chief Ranger	In charge of ranger force.
3	Assistant Chief Rangers.	Assisting Chief Ranger. One in charge of southern district; two assisting with feeding wild animals.

<u>No.</u>	<u>Class.</u>	<u>Kind of work performed.</u>
6	First-class park rangers.	In charge of ranger stations, on duty in Chief Ranger's Office, patrol duty in the park protecting wild animals, and feeding wild animals.
18	Park Rangers	Ditto. Also one on duty protecting wild animals in Gallatin Game Preserve adjoining the park on the north.

In addition to the regular employees listed above, the following were employed temporarily:

	<u>On Feb. 1st.</u>	<u>On Feb. 29th.</u>
Engineer, assisting with repairs to motor vehicles,	1	1
Teamster, general work at Headquarters, in stables, hauling supplies etc.	<u>1</u>	<u>1</u>
Totals,	<u>2</u>	<u>2</u>

Leaves of absence.

During February annual leaves were granted as follows:

Ralph L. Shultz, telephone switchboard operator, 1st to 6th, 5 days.
 Wm. A. Kelley, asst. Buffalo keeper, 1st to 2d, 2 days.
 Clarence O. Lauser, clerk, 8th to 15th, 8 days.
 Lloyd M. MacRae, clerk, 20th to 29th, 7 days.
 F. L. Plumlee, blacksmith, 16th to 16th, 1 day.
 William E. Purdue, Park Ranger, 1st to 17th, 14 days.
 A. B. Grim, auto mechanic, 3d to 21st noon, 16½ days.
 Frank J. Winess, Park Ranger, 8th to 29th, 17 days.
 Bert L. Reese, Park Ranger, 14th to 17th, noon, 2½ days.
 Ralph V. Harr, Park Ranger, 17th to 29th, 10 days.
 A. B. Grim, auto mechanic, noon 21st to 29th, sick leave applied for, 8½ days.

Appointments.

appointments were received for
No new appointments were made during the month. Recommendations were made for appointment of several of the men who will be needed as temporary park rangers for the summer season, *but they will not be called upon until June*

Separations.

There were no separations from the service during the month.

Vacancies.

1 Assistant Chief Ranger.

III. WORK COMPLETED.

(a) Construction of Physical Improvements.

No construction work was engaged in during the month, all work being on a winter basis.

(b) Maintenance and Repair of Physical Improvements.

No work was done on roads in the park during the month, except a few hours' work clearing the road between Gardiner and Headquarters of falling rock once or twice during thawing weather.

Changes were made in the partitions in the garage and shop building, so as to provide more room in the work shop of the garage, and give a little more room for shoeing horses in the blacksmith shop. The partition in the same building to provide for a separate room for motor-cycle repair work was also completed, and a window enlarged to give more light in the same room.

(c) Improvements by Concessioners.

As winter conditions prevailed, no improvements of any consequence were attempted by any of the concessioners.

(d) Service to the Public.

This feature was unimportant, as there are no visitors of any consequence during the winter months.

IV. WORK IN PROGRESS.

The Yellowstone Park Camps Company had three or four men at work at Mammoth Camp, overhauling transportation (trucks), a carpenter building benches etc. for next summer's use, and doing odd jobs that will save time when preparations have to be made for the season's travel.

The Yellowstone Park Transportation Company had but one man employed, who makes daily trips to Gardiner carrying the mail, and feeding the Company's saddle horses which were brought in from the range on February 23 because they were starving to death there. A carpenter and two helpers who are living at Mammoth this winter, worked for this company on days when the weather was warm and pleasant enough to work outside, remodeling the Mammoth bunk house.

Our shop force continued the work of overhauling our motor transportation, and repairing tools and heavy road equipment for use next season. This work was somewhat handicapped by the fact that the automobile mechanic was on sick report most of the month from a rather severe case of influenza. As it was, however, the trucks necessary for hauling freight and for feeding hay to wild animals were kept in repair, one Ford car used for general purposes had a fairly thorough overhauling, and another Ford car, the oldest one we have which had been out of commission for two years, was thoroughly overhauled so it is as good as a new car, at an expense for new parts of about \$75.00

The foreman in charge of the stables made excellent headway overhauling and repairing harness, of which we have a large amount which is used on road work in the park in summer.

The ranger force continued regular patrols for protecting the wild animals. Ranger George Winn, in charge of Soda Butte Station, did especially good work, traveling a total of 235 miles in his district during the month, which is an excellent average when all patrols must be made on skis. Several rangers were still engaged in hauling hay from ranches north of Gardiner and feeding the elk, deer, antelope and mountain sheep in that vicinity. Ranger Reese was relieved from this work and sent out to assist the Buffalo Keeper the latter part of the month. Assistant Chief Ranger Smith was relieved from assisting in hauling hay, early in the month, and stationed in the Gallatin Game Preserve just north of the park where many of our elk are wintering, relieving Reese who had been stationed there, who took Smith's place hauling hay until he was sent to the

Buffalo Farm and Slough Creek, where the buffalo herd is now being fed.

Ranger Douglas was relieved from the work of hauling hay at Gardiner, and sent back to his station at Gallatin in the northwest corner of the park, the latter part of the month. Ranger Lawson continued the work of feeding the elk herd near Headquarters, and the herd of surplus horses which are being wintered in the buffalo corral at Mammoth, throughout the entire month.

Ranger Skinner made excellent progress in collecting specimens for the proposed museum, cataloguing notes on birds, animals, etc., indexing the library, and securing photographs for file. In this work he was assisted at times by clerks in the office who were up on their regular work.

The buffalo keeper and his assistant are engaged in feeding the tame buffalo herd, at the Farm on Lesser River, and on Slough Creek where hay was put up last summer. Inasmuch as it was necessary to take most of the herd to Slough Creek, a ranger (Reese) was sent out to assist them.

V. WORK BEGUN.

No new work was begun during the month.

VI. PLANS OR PROPOSED WORK.

No new work is contemplated for the month of March. It is intended, however, to continue the work in progress, namely overhauling tools and heavy equipment in the blacksmith shop, overhauling of motor transportation in the garage, making signs and painting them by the painter, and also renovating employees quarters; repairing buildings, feeding wild animals, and making regular patrols.

VII. POLICIES.

No new policies were adopted during the month.

VIII. COST OF OPERATION.

Cost reports for February are enclosed herewith. These consist principally of salaries of regular employees on a winter basis.

IX. OTHER MATTERS OF INTEREST.

Wild Animals.

The mild weather which characterized the month of February was favorable to our elk, deer, antelope, and mountain sheep, and its continuance will mean that they will get through the winter without the serious losses that seemed inevitable last fall when the winter began so early and so severely. It did get cold enough, and remained so, during the latter part of February, so many of the elk that went up the latter part of January and early in February, came back to the feeding grounds, and most of them have remained there since. A total of 212 tons of hay from stacks were fed to the elk near Gardiner, and the antelope, mountain sheep, and deer during the month, and 33 tons of baled hay were fed the elk and deer near Headquarters. This leave but about 50 tons on hand for March feeding, but it is expected that additional hay to the extent of at least 250 tons can be provided by a special allotment carried in the General Deficiency bill now before Congress, and this much will most certainly be needed to carry the elk herds through the trying weather characteristic of the month of March. About 600 elk and 50 deer were fed at Headquarters, and at Gardiner the numbers consisted of three to four thousand elk, 300 deer, 250 antelope, and 11 mountain sheep.

Buffalo, wild herd. No reports of the wild herd of buffalo were received in February.

Buffalo, tame herd. There were 407 animals in this herd on February 1st, and there was no change in its status during the month. Authority was received for shipment of one bull to Hibbing, Minn., and one to the State of Wyoming, but this is not practicable at the present time, as the roads are not good enough to permit of hauling a canted buffalo in from the farm. The main part of the herd was driven from the farm on Lamar River to the locality on Upper Slough Creek where hay was put up last summer, on February 23d, so as to utilize this hay for their winter forage. Ranger Reese was assigned to assist in feeding them, as it takes an additional man due to the necessity of dividing the herd.

Bears. No bears were seen during the month.

Antelope. The small herd of antelope, about 250 in number, was fed with the elk, and seemed to be generally in good condition. Three were found dead during the month, probably from old age.

Deer. About 300 deer were fed with the elk near Gardiner, and about 20 were fed near Headquarters. Generally they appear to be in their usual good condition for this season, but one is found dead occasionally, from old age. The three white-tailed deer that left the park and went to Bone Mountain down the Yellowstone River last month returned during February, coming back via the Yellowstone River bridge at Corwin Springs, and up the west side of the river. They are easily recognized as this variety of deer is rather scarce.

Elk. The conditions which effect the possible heavy loss of elk were encouraging throughout the month, and with a reasonably early spring it now seems as if the loss might be not much more than normal. Nearly five thousand were fed during the month, near Gardiner and at Headquarters. Many did not come in for hay at all.

No new reports on the number and condition of the elk that are ranging outside of the park in the Absaroka National Forest were received, nor were any special reports received of those wintering on the West Gallatin River.

By mutual agreement with the Forest Service officials the proposal to feed the elk in the Absaroka National Forest in the vicinity of the ranger station at Carbella was abandoned, as these elk also began to go back and to return to the park, due to warm weather. These conclusions were drawn after conference with Mr. W. C. Henderson, Assistant Chief of the United States Biological Survey, and Mr. Barnes of the grazing department of the U. S. Forest Service, who visited the park February 2 to 4.

Several hundred elk remained outside of the park in the Gallatin Game Preserve, and appeared to be in excellent condition. During the heavy snowstorm they descended upon some of the farms and devastated the haystacks and damaged the wire fences, resulting in serious complaints by the owners.

Southern elk herd: Messrs. Henderson of the Biological Survey, and Barnes of the Forest Service, mentioned above, came here from the feeding grounds in Jackson Hole, and they stated that the elk there were coming through in good condition - they

thought they looked rather better than do ours. The State Game Warden of Wyoming informs me that his experiment of feeding cotton seed cake to elk is successful and that they eat in preference to hay and are doing well on it. Of course it does not take the place of hay entirely, but with its use they cut down the hay ration about one-half.

Twenty-three elk, mostly calves, died on the feeding grounds at Mammoth during the month, and 180 died on the feeding grounds near Gardiner, mostly calves and very old cows. This is not a heavy percentage of loss for February. Generally speaking it is considered that the herd is in fair condition.

- Shipment of elk. Two male elk and 3 females were shipped to the Sonora Experiment Station of Texas, on February 2, 1920, under your authority given to President Bizzell of the Agricultural College of Texas on January 27. One of these died en route, and I understand a claim will be made for its value to the express company, as they were all in excellent condition when they left here. Three male elk were shipped to General H. C. Trexler, for the City of Allentown, Penn., on February 14, by authority dated January 31. Total shipped during the month 5, all by express, crated, charges collect. Woodticks have begun to show up on the elk in large numbers, and if many more are shipped it is advisable to have them sprayed for ticks.

Mountain Sheep. A few mountain sheep were fed with the elk in Gardiner Canyon.

Moose. No moose were reported during the month.

Carnivorous Animals. Rangers Henry Anderson and Court Dewing devoted their whole time to hunting and trapping during the month. Anderson killed 6 male coyotes, and Dewing killed 7 coyotes and 2 foxes.

Grazing. Fresh snows covered the range and there was no grazing worth mentioning in the park during February.

Birds.

Winter birds including crows, Clark's crows, ducks, water ouzels, occasionally a magpie, eagles, and sparrows were in evidence.

Fish.

A few residents fished, in Gardiner River below the mouth of Boiling River where the water is open all winter, with fair success.

Protection of Game.

Usual patrols were made from the ranger stations, and one ranger was stationed constantly in the Gallatin Game Preserve which adjoins the park west of the Yellowstone River, to protect the elk and antelope that are wintering outside. The elk in the Absaroka Forest east of the Yellowstone River adjoining the park are protected by the patrols of forest rangers stationed there for the purpose. State deputies patrol both of these territories.

Arrests and Violations of Law.

No violations were reported, either inside or outside of the park.

Accidents and Casualties.

The only accident reported was the case of our blacksmith whose eye was injured by flying pieces from the emery wheel which he was using. He was given first aid by his comrades, but unsuccessfully, and the following day he decided to report the matter and I took him to a doctor at Chico Hot Springs where three pieces of the wheel were removed from his eye. He was laid up but one day, and made a complete recovery. This was reported to the Compensation Commission on the regular blank form.

Sickness.

While there was no very serious sickness, many of our employees were indisposed at different times during the month, from severe colds or possibly a mild attack of the influenza. Mr. Crim, our automobile mechanic, and his wife, returned from a leave of absence spent in Billings, Montana, with severe indisposition which proved to be influenza, and it was necessary to call a doctor from Chico Hot Springs for them. They have completely recovered.

Special Visitors.

The following named people visited the park during February:

Mr. T. E. Keefe, Supt. of Hotels, Yellowstone Park Hotel Co., February 7 to 8, on business for the company.

Mr. H. H. Hays, General Manager, and Mr. E. C. Moorman, his Assistant, of the Yellowstone Park Camps Company, February 7 to 8, on business pertaining to their permanent camps.

Mr. Howard Sibbald, Chief Game Warden, Canadian National Parks, Feb. 27 to 28. Mr. Sibbald came after two express car-loads of elk authorized by you on February 18, which he left Gardiner with on March 2d.

Mr. W. S. Henderson, Assistant Chief of the U. S. Biological Survey, and Mr. Barnes of the grazing department of the U. S. Forest Service, Feb. 2 to 4, in connection with the handling of the elk situation outside of the park.

Doctor Crawbuck, of Chico Hot Springs, Mont., Feb. 12 to 13, to attend Mr. and Mrs. Grim who were ill with influenza.

Motion Pictures.

Representatives of motion picture corporations operated in the park as follows:

<u>Permit</u> <u>No.</u>	<u>Date of</u> <u>Authority.</u>	<u>Name</u>	<u>and</u>	<u>Address</u>	<u>In Park</u>
	Jan. 7 1920	Jesse G. Sill for Adventure Scenic Corporation.		Portland, Ore.	Feb. 1-2

Notice of approval and numbers given the permits for taking motion pictures in the park have not been received from your office, therefore the permit number cannot be stated.

Miscellaneous.

Entertainments. Free picture shows were held every Saturday evening, at the Post Exchange auditorium, the expenses being paid under a co-operative arrangement with the employees and the residents of Gardiner and vicinity. "Paramount" pictures by famous movie stars are shown. The average attendance is about 100 people.

Religious Services. Church services were held in the chapel but one Sunday, as Rev. J. P. Pritchard who usually conducts them is taking his annual leave of absence from his mission pastorate in Emigrant, Montana. Christian Scientists held public readings at 1:30 P.M. every Sunday.

K. RECEIPTS AND REMITTANCES.

The usual report of monies collected, due and transmitted will be forwarded tomorrow.

Cordially yours,

Chester A. Lindsay,

Acting Superintendent.

Inclosures.

The Director,
National Park Service,
Department of the Interior,
Washington, D. C.

March 9, 1920.

Dear Mr. Albright:

This is a copy of my very commonplace report for February. Sorry it isn't more interesting, but things were quiet and enthusiasm at ebb. So many of us have been about half sick during the past few weeks, and leaves have been quite frequent too.

Sorry I didn't get your letter written en route in time to answer before you left Berkeley, but will write in a few days on the subjects you mentioned, with hopes my letter may be forwarded to you while you are in Hawaii.

Sincerely,

Incls.